Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of the Commission's Rules Regarding Maritime Radio Equipment and Related Matters	)	WT Docket No. 14-36
	)	
Petition to Request that FCC Amend the Rules to Permit the Use of Maritime VHF Portable Radios Ashore Near Areas of Maritime and Boating Activity	)	RM-11540
	)	
Petition for Rulemaking to Amend Part 80 of the Commission's Rules to Provide for a Digital Small Message Service on Certain Maritime VHF Channels	)	RM-11563
	)	
Petition to Amend Part 95 of the Commission's Rules to Provide for Certain Personal Radio Service Devices	)	RM-11667

NOTICE OF PROPOSED RULEMAKING

Adopted: February 27, 2014 **Released: February 28, 2014**

Comment Date: (60 days after date of publication in the Federal Register)
Reply Comment Date: (90 days after date of publication in the Federal Register)

By the Commission:

I. INTRODUCTION

1. In this *Notice of Proposed Rulemaking*, we propose to update rules that apply to maritime radio services, in order to better protect lives and property at sea, as well as support improved day-to-day operations. We propose to update the rules and requirements for technologies used to locate and rescue distressed ships and individuals in distress at sea or on land to provide better and more accurate data to rescue personnel. In addition, we propose to remove a regulatory hurdle to the assignment or transfer of control of ship licenses, consistent with our approach in other services.

2. Below we address petitions for rulemaking filed by the National Global Maritime Distress and Safety System (GMDSS) Implementation Task Force (GMDSS Task Force)[1] and the Radio

[1] Petition to Request that FCC Amend the Rules to Permit the Use of Maritime VHF Portable Radios Ashore Near Areas of Maritime and Boating Activity, RM-11540 (filed June 10, 2009) (GMDSS Task Force Petition). No party responded to the *Public Notice* seeking comment on the GMDSS Task Force Petition, Consumer & Governmental Affairs Bureau Reference Information Center Petition for Rulemakings Filed, *Public Notice*, Report No. 2891 (CGB rel. June 26, 2009) (http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-291651A1.pdf). The GMDSS Task Force was chartered by the U.S. Coast Guard to supplement government functions in expediting the implementation of the GMDSS. The membership includes over 1,500 representatives of government agencies, commercial vessel

(continued….)

Technical Commission for Maritime Services (RTCM)[2] regarding the Maritime Radio Services and certain other proposed rule changes.[3] We also address a National Transportation Safety Board (NTSB) recommendation regarding maritime safety equipment[4] and, on our own motion, additional maritime-related rule changes. Specifically, we seek comment on whether to amend Parts 80 and 95 of our rules to:

(1) require emergency position indicating radio beacons (EPIRBs) to be capable of broadcasting position data when activated, which will improve the ability of rescue personnel to locate distressed ships;

(2) update the equipment standards for Personal Locator Beacons (PLBs) to ensure that PLBs meet updated functional and technical parameters;

(3) authorize equipment certification and use of Satellite Emergency Notification Devices (SENDs) that comply with RTCM standards, providing for the use of additional technologies for safety of life and rescue scenarios;

(4) permit equipment certification and use of Maritime Survivor Locating Devices (MSLDs) that comply with RTCM standards, in order to enhance maritime safety;

(5) provide for equipment certification and use of Automatic Identification System Search and Rescue Transmitters (AIS-SARTs) that comply with international standards, which will contribute to maritime safety;

(6) clarify the rules regarding radar equipment;

(7) permit the use of portable marine VHF radio transmitters by persons on shore;

(8) permit VHF digital small message services (VDSMS) on certain maritime VHF channels;

(9) allow assignment or transfer of control of ship station licenses, removing a regulatory hurdle to secondary market transactions; and

(10) correct certain typographical errors.

(Continued from previous page)
owners and operators, recreational vessel interests, training institutions, service agents, manufacturers, trade associations, and maritime labor organizations.

[2] Petition for Rulemaking to Amend Part 80 of the Commission's Rules to Provide for a Digital Small Message Service on Certain Maritime VHF Channels, RM-11563 (filed August 19, 2009) (RTCM SMS Petition); Petition for Rulemaking to Amend Part 95 of the Commission's Rules to Provide for Certain Personal Radio Service Devices, RM-11667 (filed June 20, 2012) (RTCM Part 95 Petition); Petition to Delay or Suspend Application of Part 47, § 80.273(b) on Marine Radar on Voluntarily Equipped Vessels, and to Clarify the Applicability of § 80.273(a), WT Docket No. 00-48 (filed Feb. 27, 2012) (RTCM Radar Petition). The RTCM SMS Petition and the RTCM Part 95 Petition were placed on public notice. *See infra* notes 42 and 96 listing the commenters. RTCM is a nonprofit organization that studies maritime issues. It is comprised of marine electronics manufacturers, government organizations such as the U.S. Coast Guard, and other parties interested in maritime operations.

[3] In addition to the Maritime Radio Services, the RTCM Part 95 Petition proposes changes to the rules governing Personal Locator Beacons and Satellite Emergency Notification Devices.

[4] Letter, dated Mar. 11, 2010, from Deborah A. P. Hersman, Chairman, NTSB, to Julius Genachowski, Chairman, FCC (*NTSB Safety Recommendation M-10-1*). The NTSB recommendation is available at http://www.ntsb.gov/doclib/recletters/2010/M-10-001.pdf.

II. BACKGROUND

3. The Maritime Radio Services provide for the unique distress, operational, and personal communications needs of vessels at sea and on inland waterways.[5] Maritime frequencies are allocated internationally by the International Telecommunication Union (ITU) to facilitate interoperable radio communications among vessels of all nations and stations on land worldwide. While the Maritime Radio Services are still used extensively for safety, they provide a wide range of communication services to vessels operating in international waters, coastal areas, and inland lakes and waterways. Such uses include ordering ships' stores, inquiring about berthing facilities, making personal and business telephone calls, and changing schedules – in short, providing a means of communications for the day-to-day activities of a multi-billion dollar industry, as well as providing the critical safety link for the protection of lives and property at sea.[6]

4. The Maritime Radio Services include ship stations and coast stations. Ship station licenses authorize the use of a variety of equipment, including radiotelephones, emergency beacons, and radar installations.

5. There are two types of coast stations: public coast stations and private coast stations. Public coast stations are commercial mobile radio service (CMRS) facilities that, for a fee, allow ships to send and receive messages and to interconnect with the public switched network.[7] Each public coast station has exclusive use of one or more public correspondence channels within its service area or region of operation. By contrast, private coast stations operate on shared frequencies to serve vessels' business and operational needs, and licensees may not charge fees for the provision of communications services.

6. The pending petitions for rulemaking address various rules concerning ship and coast stations. RTCM proposes that the rules be amended to incorporate by reference the RTCM technical standards for certain equipment, including revised versions of RTCM standards currently incorporated into our rules.[8] It also proposes that the incorporation by reference of an International Electrotechnical Commission (IEC) radar equipment standard be removed from the rules.[9] The GMDSS Task Force proposes that the rules be amended to allow persons onshore to use portable marine VHF radios associated with a vessel under certain circumstances.[10]

III. DISCUSSION

A. Emergency Position Indicating Radio Beacons (EPIRBs)

7. EPIRBs are carried on board ships to alert others of a distress situation, and to assist search and rescue units in locating those in distress.[11] Specifically, the EPIRB transmits a digital signal on 406.0-406.1 MHz (406 MHz) that is detected by the search and rescue satellite-aided tracking

[5] Amendment of the Commission's Rules Concerning Maritime Communications, *Fourth Further Notice of Proposed Rule Making*, PR Docket No. 92-257, 17 FCC Rcd 227, 229 ¶ 2 (2001).

[6] Amendment of the Commission's Rules Concerning Maritime Communications, *Notice of Proposed Rule Making and Notice of Inquiry*, PR Docket No. 92-257, 7 FCC Rcd 7863, 7863 ¶ 2 (1992).

[7] *See* Implementation of Sections 3(n) and 332 of the Communications Act – Regulatory Treatment of Mobile Services, *Second Report and Order*, GN Docket No. 93-252, 9 FCC Rcd 1411, 1448 ¶ 83 (1994); *see also* 47 C.F.R. § 20.9(a)(5).

[8] *See* RTCM Part 95 Petition at 2-3; RTCM SMS Petition at 5.

[9] *See* RTCM Radar Petition at 2.

[10] *See* GMDSS Task Force Petition at 2.

[11] Jean Pierre de Lutz, *Letter*, 24 FCC Rcd 8567, 8567 (WTB MD 2009); *see also* 47 C.F.R. § 80.5.

(SARSAT)[12] system operated by the National Oceanic and Atmospheric Administration (NOAA). The digital signal provides distress alerting, homing assistance, country and identification code of the station in distress, and other pertinent information. Traditional EPIRBs rely on satellite Doppler shift to identify the distress location. Some EPIRBs, however, transmit their Global Positioning System (GPS) coordinates, which enables search and rescue authorities to determine an accurate location significantly faster than satellite Doppler shift. NTSB estimates that a GPS receiver adds about one hundred dollars to the cost of an EPIRB.[13]

8. The United States Coast Guard (Coast Guard) strongly encourages vessel owner/operators to replace traditional EPIRBs with GPS-enhanced EPIRBs.[14] In addition, NTSB has recommended that the Commission amend its rules to mandate that EPIRBs on commercial vessels that are required to carry EPIRBs be capable of broadcasting position data when activated.[15] Subsequently, RTCM updated its EPIRB standard to require an internal navigation device designed to provide position data upon activation.[16] Additionally, the new standard incorporates by reference the technical characteristics from COSPAS-SARSAT T.001,[17] ITU-R M.690-1,[18] and IEC Standard 61097-2[19] as well as certain technical characteristics not covered by any of the three documents. The revised standard also requires new EPIRBs to meet ergonomic requirements after January 1, 2014.

9. Accordingly, we seek comment on revising Part 80 to incorporate by reference the revised RTCM EPIRB standard, and requiring that all new EPIRBs meet the requirements of the standard.

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[12] SARSAT is part of the international COSPAS-SARSAT system, a cooperative development of the United States, Russia, Canada, and France (the original COSPAS-SARSAT Partners, *see* Amendment of the Maritime Services Rules to allow ships to use 406.025 MHz emergency position indicating radio-beacons for distress alerting and search and rescue functions, *Report and Order*, PR Docket No. 86-424, 3 FCC Rcd 5406, 5406 ¶ 3 (1988)). COSPAS is a Russian acronym that translates as "Space System for the Search of Vessels in Distress."

[13] *See NTSB Safety Recommendation M-10-1* at 3. EPIRBs cost from two hundred dollars to about fifteen hundred dollars. FCC Enforcement Advisory: Marine Radio – Enforcement Bureau Reminds Boaters of Marine Radio Rules, *Public Notice*, 26 FCC Rcd 7756, 7756 (EB 2011).

[14] *See* United States Coast Guard Marine Safety Advisory: Upgrade to GPS enhanced EPIRBs (May 23, 2011).

[15] *See NTSB Safety Recommendation M-10-1* at 3. The impetus for NTSB's recommendation was its investigation of the 2009 sinking of the fishing vessel *Lady Mary*. An EPIRB signal was detected by a geostationary SARSAT satellite, but no immediate action was taken because NOAA initially could not establish its position. More than an hour later, a low earth orbiting satellite crossed *Lady Mary*'s location, enabling NOAA to notify the Coast Guard of the vessel's position. By the time the Coast Guard arrived on scene, five crewmembers in the water had died from exposure. NTSB concluded that the initial inability to provide position data delayed the launch of search and rescue efforts and unnecessarily increased the risk to *Lady Mary*'s crew. By contrast, for example, four fishermen on a vessel that lost power and capsized in rough weather off the west coast of Florida in August 2013 were quickly located and rescued by the Coast Guard because the vessel's EPIRB provided GPS coordinates. *See* Steve Waters, *Boaters in trouble can rely on others or EPIRBs*, Sun Sentinel, September 14, 2013 (http://articles.sun-sentinel.com/2013-09-14/sports/fl-outdoors-boating-safety-0915-20130914_1_donzi-four-men-hillsboro-inlet).

[16] *See* RTCM Standard 11000.3 for 406 MHz Satellite Emergency Position Indicating Radio Beacons (EPIRBs), dated June 12, 2012. The prior version of the RTCM standard is currently incorporated in the Commission's Rules. *See* 47 C.F.R. §§ 80.7(f)(2), 80.1061(a) (incorporating by reference RTCM Standard 11000.2 for 406 MHz Satellite Emergency Position Indicating Radio Beacons (EPIRBs), dated June 20, 2002).

[17] COSPAS-SARSAT C/S T.001, Specification for COSPAS-SARSAT 406 MHz Distress Beacons, Issue 3 – Revision 12, October 2011.

[18] ITU-R Recommendation M.690-1 (1990-1995), Technical Characteristics of Emergency Position Indicating Radio Beacons (EPIRBs) Operating on the Carrier Frequencies of 121.5 MHz and 243 MHz.

[19] IEC 61097-2 Edition 3.0 (2008-01), "Global Maritime Distress and Safety System (GMDSS) – Part 2 COSPAS-SARSAT EPIRB – Satellite Emergency Position Indicating Radio Beacon Operating on 406 MHz – Operation and Performance Requirements, Methods of Testing and Required Test Results."

We also seek comment on the appropriate timetables for phasing out certification, manufacture, sale, and use of EPIRBs that do not comply with the new standard.[20] We ask commenters to provide information on the costs to vessel operators of complying with such a requirement, and whether the safety benefits to be derived therefrom outweigh the compliance costs. Because this rule change would in effect implement NTSB's recommendation that the Commission amend its rules to mandate that EPIRBs on commercial vessels that are required to carry EPIRBs be capable of broadcasting position data when activated,[21] we propose this rule change in lieu of NTSB's narrower recommendation.[22]

10. In addition, we propose to remove references to COSPAS-SARSAT T.001 and T.007 from our rules, given that the RTCM EPIRB standard incorporates them by reference, and that a test facility recognized by the COSPAS-SARSAT Partners must certify that the equipment meets the requirements of COSPAS-SARSAT T.001 and T.007 before manufacturers submit their certification applications to the Commission.[23] We seek comment, however, on whether we should instead revise our rules to incorporate a more recent version of COSPAS-SARSAT T.001 and T.007.

11. Finally, we propose to amend our rules to make plain that the use of EPIRBs that operate on frequencies 121.5/243 MHz is prohibited. In 2002, the Commission phased out the certification, manufacture, importation, sale, and use of those EPIRBs in light of COSPAS-SARSAT's plans to cease monitoring those frequencies.[24] The rules adopted in that proceeding expressly prohibited operation of 121.5/243 MHz EPIRBs after December 31, 2006.[25] In 2010, the Commission prohibited the continued certification, manufacture, importation, sale, and use of INMARSAT-E EPIRBs, which operated on a different frequency and were not monitored by COSPAS-SARSAT, in light of INMARSAT's discontinuance of that service.[26] The Commission consolidated the prohibition of 121.5/243 MHz EPIRBs and INMARSAT-E EPIRBs into a single rule, but while the title of the rule prohibits the certification, manufacture, importation, sale, and use of these EPIRBs, the rule language itself does not expressly mention use.[27] We propose to correct this oversight.

B. Personal Locator Beacons (PLBs)

12. Like EPIRBs, PLBs send distress signals on 406 MHz that are detected by the COSPAS-SARSAT satellite system and relayed to search and rescue authorities, but PLBs can be used on land and are intended to meet the distress alerting needs of the general public.[28] PLB use is licensed by rule under

[20] For example, when the Commission phased out 121.5 MHz EPIRBs, it ceased certifying them immediately, allowed sale and manufacture of the units for approximately a year, and permitted operation for three years after that. *See* Amendment of Parts 13 and 80 of the Commission's Rules Concerning Maritime Communications, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 00-48, 17 FCC Rcd 6741, 6761-62 ¶¶ 46-47 (2002) (*2002 Maritime R&O*).

[21] *See NTSB Safety Recommendation M-10-1* at 3.

[22] *See* Appendix B, *infra*, proposed Section 80.7(f)(2).

[23] *See* 47 C.F.R. § 80.1061(c).

[24] *See 2002 Maritime R&O*, 17 FCC Rcd at 6761-62 ¶ 47.

[25] *See* 47 C.F.R. §§ 80.1053, 80.1055, 80.1059 (2003).

[26] *See* Amendment of Parts 13 and 80 of the Commission's Rules Concerning Maritime Communications, *Fourth Report and Order and Second Memorandum Opinion and Order*, WT Docket No. 00-48, 25 FCC Rcd 7781, 7783-84 ¶ 4 (2010) (*2010 Maritime R&O*).

[27] *See* 47 C.F.R. § 80.1053.

[28] *See* 47 C.F.R. § 95.1400.

Part 95 of the Commission's Rules, which governs the Personal Radio Services (PRS). Some vessel operators not required to carry EPIRBs choose to carry PLBs instead.[29]

13. The Part 95 rules incorporate by reference the RTCM technical standard that contains minimum requirements for the functional and technical performance of PLBs.[30] RTCM has revised the standard subsequent to the version that is currently incorporated in Part 95.[31] In addition to updating the various technical requirements, the revision adds test procedures and operational scenarios for PLBs with integral GPS receivers or internal navigation devices. RTCM proposes that we update our rules to incorporate the revised RTCM PLB standard.[32] We tentatively conclude that the public interest would be served by incorporating the most recent standard, because it will ensure PLBs meet current functional and technical parameters.[33] We seek comment on this proposal. We ask commenters to provide information on the costs of complying with such a requirement, and whether the safety benefits to be derived therefrom outweigh the compliance costs. We also seek comment on the appropriate timetable for phasing out certification, manufacture, sale, and (if appropriate) use of PLBs that do not comply with the new standard.

14. Section 95.1401 of the Commission's Rules limits use of 406 MHz frequencies by PLBs "to transmission of distress and safety communications."[34] In its comments to the RTCM rulemaking petition, the Secretariat of the International COSPAS-SARSAT Programme[35] argues that the rule should be revised to limit use of the frequencies to "distress and safety of life communications," because "safety communications" do not rise to the level of distress communications related to an imminent threat to life.[36] It also recommends that the rule be revised to clarify the mechanism by which unique beacon identifications are created, and emphasize that PLB owners are required to register their beacons.[37] We seek comment on these recommendations.

C. Satellite Emergency Notification Devices (SENDs)

15. SENDs are small transmitters that provide a means for individuals in remote areas to alert others of an emergency situation and to aid search and rescue personnel to locate those in distress. They differ from PLBs in that they operate on satellite networks other than the 406 MHz COSPAS-SARSAT system. SENDs are typically subscription services that send data to a satellite which is then

[29] *See* ACR Electronic, Inc., *Order on Reconsideration*, 18 FCC Rcd 11000, 11002 n.20 (2003).

[30] *See* 47 C.F.R. § 95.1402.

[31] *See* RTCM Standard 11010.2 for 406 MHz Satellite Personal Locator Beacons, with Amendment 1 and Amendment 2, dated June 8, 2012.

[32] *See* RTCM Part 95 Petition at 2. We note that the Commission previously proposed to update the reference to the RTCM PLB standard in another proceeding. *See* Review of the Commission's Part 95 Personal Radio Services Rules, *Notice of Proposed Rule Making and Memorandum Opinion and Order on Reconsideration*, WT Docket No. 10-119, 25 FCC Rcd 7651, 7677 ¶ 69 (2010) (*Part 95 NPRM*). The standard has been revised again since that time. Other changes to the PLB rules set forth in the RTCM Part 95 Petition also were suggested in RTCM's comments to the *Part 95 NPRM* and are being considered in that proceeding.

[33] *See* Appendix B, *infra*, proposed Section 95.1402(a).

[34] *See* 47 C.F.R. § 95.1402.

[35] The International COSPAS-SARSAT Programme is comprised of the forty-three countries and agencies that manage and operate the COSPAS-SARSAT system.

[36] Comments of International COSPAS-SARSAT Programme, RM-11667, at 1-2 (COSPAS-SARSAT Comments). "Safety communications" are those that "if delayed in transmission or reception, may adversely affect the safety of life or property." 47 C.F.R. § 80.5.

[37] COSPAS-SARSAT Comments at 3-4.

used to create a Web-based report that enables the tracking of persons.[38] RTCM and the mobile satellite industry, at the request of Coast Guard and the U.S. Air Force, have developed minimum requirements for the functional and technical performance of SENDs to ensure that these devices will work in emergency situations.[39]

16. RTCM proposes that the Part 95 rules be amended to incorporate its SEND standard.[40] It does not, however, propose to prohibit the manufacture or use of satellite beacons that do not meet that standard; rather, it proposes only to prohibit beacons that do not meet the standard from being marketed as SENDs.[41] Iridium Satellite LLC (Iridium), a mobile satellite service (MSS) provider, supports the proposal.[42] Iridium argues that incorporation of the standard into our rules would ensure that devices used for tracking in emergency situations will rapidly and reliably provide rescue teams with sufficient information to mount a successful search and rescue.[43]

17. Unlike PLBs, SENDs do not require authorization under Part 95 because they already can operate pursuant to the Part 25 MSS rules.[44] The proposed rule change would provide a standard for manufacturers that choose to manufacture devices marketed as SENDs and MSS providers that choose to offer SEND service, but those manufacturers and MSS providers may follow the RTCM SEND standard regardless of whether we codify it. We do not believe that it is necessary to adopt rules incorporating what is in effect a voluntary standard. Moreover, incorporation of the standard into Part 95 would require amendment of the rules every time the standard is revised, which could unnecessarily delay implementation of improvements in SEND technology. We tentatively conclude that the proposed rule change is unnecessary and would not further the public interest.

18. Consequently, although we seek comment on RTCM's proposal, our tentative conclusion is that there is no need to amend the Part 95 rules to incorporate the RTCM SEND standard. Commenters in support of the proposal should address how the public interest would be served by incorporating RTCM's SEND standard into the Commission's rules rather than continuing to authorize SENDs pursuant to Part 25. Commenters should also address the potential costs of RTCM's proposal.

D. Maritime Survivor Locating Devices (MSLDs)

19. MSLDs are intended for use by persons at risk of falling into the water such as mariners and workers on marine installations or docks, or by divers returning to the surface out of sight of their dive boats.[45] They can be worn on or as part of a garment or life jacket, and are intended to facilitate the rescue of personnel in the vicinity of their vessel or structure so that immediate assistance can be rendered without a time-consuming and expensive search and rescue operation. In light of this narrower focus,

[38] RTCM Part 95 Petition at 2.

[39] *Id.*; *see* RTCM Standard 12800.0 for Satellite Emergency Notification Devices (SENDs), dated August 1, 2011.

[40] RTCM Part 95 Petition at 3.

[41] *Id.* at Annex 1 at 3.

[42] Comments of Iridium, RM-11667, at 2 (Iridium Comments). Iridium and the Secretariat of the International Cospas-Sarsat Programme, *see supra* para. 13, filed the only comments in response to the *Public Notice* seeking comment on the RTCM Part 95 Petition, Consumer & Governmental Affairs Bureau Reference Information Center Petition for Rulemakings Filed, *Public Notice*, Report No. 2956 (CGB rel. July. 23, 2012) (http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-315339A1.pdf).

[43] Iridium Comments at 3.

[44] *See* 47 C.F.R. Part 25.

[45] MSLDs have sometimes been referred to as "man-overboard" devices, *see*, *e.g.*, Wireless Telecommunications Bureau Clarifies that Certain 121.5 MHz Devices Are Permitted Despite Termination of Satellite Processing of 121.5 MHz Distress Signals, *Public Notice*, 24 FCC Rcd 8483, 8483 (WTB MD 2009), but that term does not fully encompass the scope of possible MSLD uses. RTCM Part 95 Petition at 3.

MSLDs do not operate on a frequency monitored by COSPAS-SARSAT, and do not transmit with as much power or for as long as EPIRBs or PLBs.[46] Instead, MSLDs transmit on frequencies that are received on a device monitored by personnel at the MSLD-wearer's vessel or facility. Because MSLDs contribute to maritime safety but do not meet the technical requirements for EPIRBs, the Wireless Telecommunications Bureau (WTB) has granted waivers of the Part 80 rules to permit the certification and use of MSLDs.[47]

20. RTCM has developed a technical standard for MSLDs.[48] We propose to incorporate its MSLD standard into our rules,[49] which would allow certification and use of MSLDs meeting the standard. RTCM proposes that, beginning one year after the effective date of the final rules adopted in this proceeding, devices intended to aid in the location of persons in the water be required to meet the MSLD standard if they operate on certain frequencies or the device sends a distress message directly to the Coast Guard or any other search and rescue agency.[50] RTCM proposes that MSLDs be authorized under Part 95 of our rules.[51]

21. We seek comment on the RTCM proposal.[52] We ask commenters to provide information on the costs of complying with such a requirement. In addition, we seek comment on whether manufacturers should be required to coordinate applications for equipment certification with the Coast Guard, as is currently required for EPIRBs.[53] We also seek comment on whether to permit the continued manufacture, marketing, and use of any devices operating on the frequencies identified by RTCM that were approved by waiver but do not meet the MSLD standard.

22. Finally, we seek comment on RTCM's proposal that MSLDs be authorized under Part 95. RTCM believes that MSLDs should be authorized under Part 95 because they more closely resemble SENDs (which, as noted above, RTCM proposes to authorize under Part 95) and PLBs, but we ask commenters to address whether, because MSLDs are specifically designed and intended for use in a marine environment, they should be authorized under Part 80 like EPIRBs and other maritime communications equipment.[54]

E. Automatic Identification System Search and Rescue Transmitters (AIS-SARTs)

23. Like EPIRBs, SARTs are carried on board ships and survival craft to alert others of a distress situation, and to assist search and rescue units in locating those in distress. A traditional SART

[46] *See*, *e.g.*, David Marshall, *Letter*, 13 FCC Rcd 23688, 23688-89 (WTB PSPWD 1998).

[47] *See id.*; Letter dated August 4, 2000 from D'wana R. Terry, Chief, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau, to Cal Havens, ACR Electronics; Briar Tek Incorporated, *Order*, 17 FCC Rcd 2204 (WTB PSPWD 2002); McMurdo Limited, *Order*, 17 FCC Rcd 7999 (WTB PSPWD 2002); Briar Tek Incorporated, *Order*, 21 FCC Rcd 11979 (WTB MD 2006).

[48] RTCM Standard 11901.1 for Maritime Survivor Locating Devices (MSLD), dated June 4, 2012.

[49] *See* RTCM Part 95 Petition at 3.

[50] *Id.* at 6. Specifically, distress frequency 121.5 MHz, marine VHF calling frequencies channels 16 (156.800 MHz) or 70 (156.525 MHz), or frequencies designated or contemplated for use by Automatic Identification Systems (AIS) (156.750 MHz, 156.850 MHz, 161.975 MHz, and 162.025 MHz).

[51] *Id.* at 3.

[52] *See* Appendix B, *infra*, proposed Section 95.1043(b).

[53] *See* 47 C.F.R. § 80.1061.

[54] If MSLDs were to be authorized under Part 80 rather than Part 95, Section 80.13 of the Commission's Rules, 47 C.F.R. § 80.13, would be amended to provide that MSLDs could be operated under any coast or ship station authorization.

acts as an active reflector of 9.2-9.5 GHz (9 GHz) radar signals.[55] Each time a 9 GHz SART detects a pulse from the radar of a searching vessel that is within approximately five nautical miles, the SART transmits a signal that is displayed on the screen of the radar that activated it. The Part 80 rules currently authorize only SARTs operating in the 9 GHz band.[56]

24. AIS is a VHF maritime navigation safety communications system standardized by the ITU that "provides vessel information, including the vessel's identity, type, position, course, speed, navigational status and other safety-related information automatically to appropriately equipped shore stations, other ships, and aircraft; receives automatically such information from similarly fitted ships; monitors and tracks ships; and exchanges data with shore-based facilities."[57] The AIS-SART, as part of the AIS maritime navigation safety communications system,[58] is used to locate a survival craft or distressed vessel by transmitting a unique identification code and GPS coordinates to all AIS-enabled devices within VHF radio range. The International Maritime Organization (IMO) has amended the GMDSS regulations to permit AIS-SARTs as an alternative to 9 GHz SARTs.[59] In addition, the IEC has approved performance and technical specifications for AIS-SARTs.[60] AIS-SARTs are coming into wider usage internationally.[61] Because AIS-SARTs contribute to maritime safety but do not meet the technical requirements for 9 GHz SARTs, WTB has granted waivers of the Part 80 rules to permit the certification and use of AIS-SARTs that meet the IMO and IEC requirements.[62]

25. We propose to incorporate the IMO and IEC standards into our rules, which would allow certification and use of AIS-SARTs meeting those standards.[63] We also propose to require manufacturers to coordinate equipment certification applications with the Coast Guard.[64] We invite comment on our proposal to authorize the certification and use of AIS-SARTs, and on the potential costs and benefits.

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[55] *See* Waiver of Certain Global Maritime Distress and Safety System (GMDSS) Rules Applicable to Fishing Vessels and Small Passenger Vessels, *Order*, 14 FCC Rcd 528, 530 n.13 (1988).

[56] *See* 47 C.F.R. § 80.1101(c)(6). All cargo vessels over three hundred gross tons must carry survival craft equipment consisting of two handheld VHF radios and a 9 GHz SART; for cargo vessels over five hundred gross tons and passenger vessels, the requirement increases to three handheld VHF radios and two SARTs. *See* 47 C.F.R. § 80.1095(b).

[57] 47 C.F.R. § 80.5; *see also* Amendment of the Commission's Rules Regarding Maritime Automatic Identification Systems, *Report and Order*, WT Docket No. 04-344, 21 FCC Rcd 8892, 8894-8901 ¶¶ 4-11 (2006).

[58] *See* Amendment of the Commission's Rules Regarding Maritime Automatic Identification Systems, *Memorandum Opinion and Order and Notice of Proposed Rule Making*, WT Docket No. 04-344, 19 FCC Rcd 20071, 20074 ¶ 5 (2004).

[59] *See* IMO Resolution MSC.246(83), "Adoption of Performance Standards for Survival Craft AIS Search and Rescue Transmitters (AIS-SART) for Use in Search and Rescue Operations." The IMO is an agency of the United Nations that specifies regulations for the maritime service, such as equipment carriage requirements for certain classes of ships.

[60] *See* IEC 61097-14 Ed. 1.0 (2010-02), "Global maritime distress and safety system (GMDSS) – Part 14: AIS search and rescue transmitter (AIS-SART) – Operational and performance requirements, methods of testing and required test results."

[61] *See*, *e.g.*, IMO SN.1/Circ.322, Information on the Display of AIS-SART, AIS Man Overboard and EPIRB-AIS Devices (24 June 2013).

[62] *See* McMurdo, Ltd., *Order,* 25 FCC Rcd 9073 (WTB MD 2010); McMurdo, Ltd., *Order*, 27 FCC Rcd 407 (WTB MD 2012).

[63] *See* Appendix B, *infra*, proposed Sections 80.7(b)(28), (d)(14) and 80.233(a).

[64] *See* Appendix B, *infra*, proposed Section 80.233(b). Our rules already require such coordination for other AIS equipment. *See* 47 C.F.R. §§ 80.231, 80.275.

F. Ship Radar Installations

26. Section 80.273 of the Commission's Rules contains the technical requirements for radar equipment installed on ships.[65] In the *Fourth Report and Order and Second Memorandum Opinion and Order* in WT Docket No. 00-48 (*Fourth Report and Order*), the Commission amended Section 80.273 by, among other things, updating the rules for ship radar equipment and incorporating by reference relevant international standards for such equipment, including IEC 62388[66] for compulsory vessels[67] and IEC 62252[68] for voluntary vessels.[69] The Commission grandfathered existing ship radar equipment, but prohibited any new installations not compliant with the new standards.[70]

27. RTCM proposes that the incorporation by reference of IEC 62252 be removed. It states that the standard has not been adopted by any other country, and manufacturers have not designed or built radar sets to this standard.[71] RTCM states that radar equipment for smaller vessels is now being based on IEC 62388, as simplified appropriately for those vessels.[72] We agree with RTCM that the requirement for voluntarily equipped vessels to comply with IEC 62252 should be removed so that voluntary vessels can install new radar equipment while appropriate standards are developed and adopted. We seek comment on this proposal, and on the potential costs and benefits.[73] Commenters that propose an alternative standard for radar equipment on voluntary vessels should also discuss where in Part 80 such a standard should be incorporated. Section 80.273 is located in Subpart F ("Equipment Authorization for Compulsory Ships"), and we tentatively agree with RTCM that any equipment standard for voluntary installations should be incorporated in a different subpart.[74]

28. In addition, we propose to clarify the applicability of Section 80.273(a)[75] regarding compulsory ship radar equipment. In the *Fourth Report and Order*, the Commission moved the standards applicable to compulsory vessels from paragraph (b) of Section 80.273 to paragraph (a), but inadvertently

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[65] *See* 47 C.F.R. § 80.273.

[66] IEC 62388, "Maritime navigation and radiocommunication equipment and systems—General requirements—Methods of testing and required test results, Edition 1.0, 2007-12.

[67] Compulsory vessels are required by statute or treaty to be equipped with radiocommunication equipment. 47 C.F.R. § 80.5.

[68] IEC 62252, "Maritime navigation and radiocommunication equipment and systems—Radar for craft not in compliance with IMO SOLAS Chapter V—Performance requirements, methods of test and required test results," First edition, 2004–07.

[69] *See 2010 Maritime R&O*, 25 FCC Rcd at 7789-90 ¶ 16.

[70] *Id.* at 7790 ¶ 17. The rule changes took effect on January 3, 2012.

[71] *See* RTCM Radar Petition at 2. In response to the RTCM Radar Petition, WTB granted a blanket waiver of Section 80.273(b) to permit voluntary vessels to carry equipment that does not comply with IEC 62252, and allow authorization of radar equipment without reference to any particular standard if the equipment is intended for use solely on voluntary vessels. *See* Wireless Telecommunications Bureau Clarifies and Waives Requirements for Ship Stations Radar Equipment, *Public Notice,* 27 FCC Rcd 6046 (WTB MD 2012) (*Ship Radar Public Notice*).

[72] *See* RTCM Radar Petition at 2. RTCM also states that the IEC is considering withdrawal of IEC 62252. *Id.*

[73] *See* Appendix B, *infra*, proposed Section 80.273.

[74] *See* RTCM Radar Petition at 2.

[75] *See* 47 C.F.R. § 80.273(a). RTCM states that Section 80.273(a) "is potentially in conflict with" Coast Guard carriage requirements in 33 C.F.R. § 164.72(a) for radar equipment on certain domestic towing vessels in that Section 80.273(a) imposes a higher standard for these vessels. *See* RTCM Radar Petition at 3. RTCM also states that it is preparing a revised standard for radar installations on towing vessels, which it will recommend to Coast Guard. We will address this issue in a subsequent proceeding after the development of appropriate standards.

failed to update a cross-reference later in the rule. We propose[76] to revise Section 80.273 accordingly to clarify that radar installations on compulsory vessels must meet the standards now incorporated in Section 80.273(a).[77]

G. Portable Marine VHF Radios on Shore

29. Section 80.115(a)(2) of the Commission's Rules prohibits the use on shore of a portable marine VHF radio transmitter associated with a vessel.[78] The GMDSS Task Force asserts that this rule is frequently ignored because of the ease and convenience with which such radios can be used to communicate between vessels and shore parties.[79] It proposes that the rule be amended to allow persons on shore within three miles to use portable marine VHF radios to communicate with their vessel under the authority of the ship station authorization.[80]

30. Under the current rules, portable marine VHF radios may be used on shore only pursuant to a private coast station license or a marine utility station license.[81] Only certain maritime-related entities are eligible,[82] and communications may pertain only to the operational and business needs of ships.[83] Limitations on the use of maritime frequencies are intended to minimize interference to marine-related communications, particularly distress and safety messages.[84] That private coast station and marine utility stations must be individually licensed (as opposed to most ship stations, which are licensed by rule[85]) facilitates efforts to identify interference sources. The prohibition on other use of portable marine VHF radio transmitters on shore provides a bright-line rule that licensees understand and the Commission can enforce.[86]

31. We tentatively conclude that it would not further the public interest to permit the use of portable marine VHF radio transmitters by persons on shore under the authority of their ship station authorization. While the GMDSS Task Force asserts that the difficulty of enforcing the existing prohibition breeds disrespect for the Commission's rules, it does not explain how its proposed rule would more effectively be enforced to ensure that portable marine VHF radio transmitters are used on shore only to communicate with an associated vessel and only within three miles. Nor does the petition explain why shore parties' communications needs cannot be met by CMRS or PRS options.[87] We invite commenters

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[76] *See* Appendix B, *infra*, proposed Section 80.273(a).

[77] *See Ship Radar Public Notice*, 27 FCC Rcd at 6047.

[78] *See* 47 C.F.R. § 80.115(a)(2).

[79] *See* GMDSS Task Force Petition at 1-2.

[80] *Id.* at 2.

[81] *See* 47 C.F.R. § 80.507; *see also*, *e.g.*, WTB Releases Fact Sheet on New Ship Radio Licensing Procedures (WTB rel. Dec. 2, 1996) (1996 WL 689017) ("You must have a special license, called a marine utility station license, to operate a hand-held marine radio from land -- a ship station license IS NOT sufficient.").

[82] *See* 47 C.F.R. § 80.501(a).

[83] *See* 47 C.F.R. §§ 80.507(a), 80.515.

[84] *See* Enforcement Bureau Reminds Boaters of Marine Radio Rules: Directs Boaters to Check Safety Communications Equipment to Ensure Compliance, *Public Notice*, 26 FCC Rcd 7756, 7756-57 (EB 2011).

[85] *See* 47 C.F.R. § 80.13(c).

[86] *See*, *e.g.*, Vincent E. Aversa, Jr., *Notice of Apparent Liability for Forfeiture*, 26 FCC Rcd 1181, 1181-82 ¶¶ 3-4 (EB 2011); Danny R. McKinney, *Forfeiture Order*, 20 FCC Rcd 10084, 10084 ¶ 3 (EB 2005).

[87] *See* MariTEL, Inc. and Mobex Network Services, LLC, *Report and Order*, WT Docket No. 04-257, 22 FCC Rcd 8971, 8977 ¶ 8 (2007) ("demand to use the frequencies for maritime public correspondence communications seems to be waning, due in large part to the availability to mariners of cellular, PCS, and satellite services"); Amendment of the Commission's Rules Concerning Maritime Communications, *Second Report and Order and Second Further*

(continued….)

to discuss whether the rule is as widely ignored as the GMDSS Task Force suggests, and, if so, what actions the Commission can take (*e.g.*, increasing outreach, strengthening warnings) to address the problem.

32. Commenters in support of the GMDSS Task Force's proposal should address how the public interest would be served by allowing such use. We ask commenters to discuss whether allowing routine VHF communications between shore parties and associated vessels would have a negative impact on maritime communications,[88] and how to minimize such an impact. For example, if use of a portable marine VHF radio transmitter on shore is permitted, should it be limited to or excluded from particular channels?

H. VHF Digital Small Message Services (VDSMS)

33. Channels in the 156-162 MHz band in the international VHF Marine Band defined in Appendix 18 of the ITU Radio Regulations[89] are used by ship stations to communicate with coast stations and other ship stations. Channels are made available according to the type of communication and the nature of the ship's operation. Private communications frequencies are available for safety communications, calling, control of ship movement, and navigational purposes.[90] Other channels are designated for VHF Public Coast (VPC) station use and are available for public correspondence.[91] In the United States, maritime communications generally are limited to particular emission designators in order to avoid interference between users; a full range of data transmissions that satisfy the applicable emission mask limits is permitted only on VPC frequencies and one channel in Alaska.[92]

34. The ITU has recognized the future need for worldwide systems to exchange data and email on maritime VHF channels and the availability of new digital data systems that provide this service efficiently and without harmful interference to marine users.[93] In order to meet this need and to ensure interoperability, RTCM has, in accordance with these and other relevant international reports and standards, developed a technical standard for VDSMS that enables transmission of short digital messages without interfering with other communications on the same channel.[94] The RTCM VDSMS standard specifies minimum functional and technical requirements for VDSMS.[95] The standard allows for

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Notice of Proposed Rule Making, PR Docket No. 92-257, 12 FCC Rcd 16949, 16960 n.45 (1997) (*Maritime Second R&O*) ("Exempt vessel operators may choose to install a marine VHF radio, cellular phone, citizens band (CB) radio, amateur radio or no radio at all based on their areas of operation and communications needs.").

[88] *See Part 95 NPRM*, 25 FCC Rcd at 7668-69 ¶ 45 (expressing concern about interference to marine distress, safety, and navigation communications from land-based use of radios that combine Family Radio Service frequencies and VHF marine frequencies).

[89] *See* ITU *Radio Regulations* App. S18.

[90] *See* 47 C.F.R. § 80.373(f).

[91] *See* 47 C.F.R. § 80.371(c).

[92] *See* 47 C.F.R. § 80.207(d); *see also* Amendment of Parts 13 and 80 of the Commission's Rules Concerning Maritime Communications, *Second Report and Order, Sixth Report and Order, and Second Further Notice of Proposed Rule Making*, WT Docket No. 00-48, 19 FCC Rcd 3120, 3156 ¶ 69 (2004); *Maritime Second R&O*, 12 FCC Rcd at 16981 ¶ 64.

[93] *See* Recommendation ITU-R M.1842.1, Characteristics of VHF radio systems and equipment for the exchange of data and electronic mail in the maritime mobile service RR Appendix 18 channels; Report ITU-R M.2122, EMC assessment of shore-based electronic navigation (eNAV) infrastructure and new draft Standards for data exchange in the VHF maritime mobile band (156-174 MHz).

[94] *See* RTCM Standard 12301.1 for VHF-FM Digital Small Message Services, dated July 10, 2009.

[95] The standard contains general requirements for VDSMS, *e.g.*, operating frequencies, channel access method, receiver characteristics, and electromagnetic compatibility with other radio systems in the geographical/spectral (continued….)

VDSMS to be integral to marine VHF receiving and transmitting communications equipment. It specifies a channel access method that transmits data only when the channel is not being used, so that calls in progress are not disrupted.[96]

35. RTCM proposes that the Part 80 rules be amended to incorporate its VDSMS standard by reference in order to permit transmission of short data messages on VHF maritime private communications frequencies.[97] Specifically, it proposes amending Section 80.351[98] to authorize VDSMS operation, and Section 80.361[99] to incorporate the RTCM standard and specify that VDSMS will not be permitted on or adjacent to marine safety and security channels and other channels excluded under Appendix 18 of the Radio Regulations.[100]

36. We believe that accommodating VDSMS in the Commission's rules will advance the Commission's goal of promoting flexibility and efficiency in the use of marine radio equipment in a manner that will further maritime safety. VDSMS can significantly enhance maritime communications without competing or interfering with the current use or users. We tentatively conclude, therefore, that we should amend Part 80 to incorporate by reference the RTCM standard and provide for the certification and use of VDSMS equipment that complies with that standard.[101] To this end, we propose to amend

(Continued from previous page)
vicinity of the VDSMS. *See id.* at 1. RTCM notes that it plans future separate Annexes to the standard that will include requirements for the two specific technology implementations (the 9600 BPS modulation used in Recommendation ITU-R M.1371-3 and the 43200 BPS π/8 D8PSK modulation used in Recommendation ITU-R M.1842 Annex 1) to include specifics such as packet data structure, message types, error detection/correction and other technical details associated with each technology. *Id.* We will seek comment on these proposed requirements at that time.

[96] *See* RTCM SMS Petition at 5.

[97] *See id.* Twenty-six supporting comments were filed in response to the *Public Notice* seeking comment on the RTCM SMS Petition, Consumer & Governmental Affairs Bureau Reference Information Center Petition for Rulemakings Filed, *Public Notice*, Report No. 2898 (CGB rel. Sept. 15, 2009) (http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-293413A1.pdf). *See* Comments of Sea Tow Services International (filed Oct. 15, 2009); Comments of MariTEL (filed Oct. 15, 2009); Comments of Peter Frederiksen (filed Oct. 8, 2009); Comments of Steve Burdett (filed Oct. 5, 2009); Comments of Don Gemmell (filed Oct. 5, 2009); Comments of Steve Amato (filed Oct. 6, 2009); Comments of Paul Raposa (filed Oct. 6, 2009); Comments of Ryan Fitchett (filed Oct. 5, 2009); Comments of Roy Collins (filed Oct. 5, 2009); Comments of Roger B. Zavacki (filed Oct. 5, 2009); Comments of Rich Kolasinski (filed Oct. 5, 2009); Comments of Pat Adams (filed Oct. 5, 2009); Comments of Lisa Verdine (filed Oct. 5, 2009); Comments of Kenneth E. Skiles (filed Oct. 5, 2009); Comments of Jon Jowett (filed Oct. 5, 2009); Comments of Jim Ryan (filed Oct. 5, 2009); Comments of Jay Riling (filed Oct. 5, 2009); Comments of Pat Kerekes (filed Oct. 5, 2009); Comments of Andrew Davala (filed Oct. 9, 2009); Comments of Todd Tally (filed Oct. 5, 2009); Comment of John Bonnett (filed Oct. 5, 2009); Comments of James I. Fear (filed Oct 5, 2009); Comments of Robert Stearns (filed Oct 2, 2009); Comments of Anacortes Marine Electronics, Inc. (filed Oct. 2, 2009); Comments of Steve Wallace (filed Oct. 2, 2009); Comments of GMDSS Task Force (filed Sept. 22, 2009).

[98] 47 C.F.R § 80.351.

[99] 47 C.F.R § 80.361.

[100] *See* RTCM SMS Petition at 6-8. Specifically RTCM proposes to exclude Channels 6 (156.300 MHz), 67 (156.375 MHz), 70 (156.525 MHz), 13 (156.650 MHz), 15 (156.750 MHz), 75 (156.775 MHz), 16 (156.800 MHz), 76 (156.825 MHz), 17 (156.850 MHz), 22A (157.100 MHz), 87A (161.975), and 88A (162.025 MHz), and Vessel Traffic Services (VTS) channels designated by Section 80.373(f), 47 C.F.R § 80.373(f), in Coast Guard VTS areas.

[101] In addition, we agree with RTCM that VDSMS operation on the non-excluded VHF frequencies would be subject to existing eligibility requirements. *See* Letter dated August 26, 2009 from R.L. Markle, President, RTCM to Jason Smith, President & CEO, MariTEL, Inc. (attached to Comments of MariTEL, Inc.). For example, recreational vessels could not operate on commercial frequencies, and no use of VPC frequencies would be permitted without the VPC licensee's consent.

Section 80.351 and add a new Section 80.364,[102] and we seek comment thereon. Commenters should also address the potential costs of RTCM's proposal. In addition, we ask commenters to address whether any other Part 80 rules should be amended, or any additional standards incorporated, in order to implement this proposal. Commenters should also address the potential costs of RTCM's proposal. Finally, we seek comment on whether to amend the Part 80 technical rules to permit VDSMS on VHF maritime private communications frequencies without adopting any specific standard.

I. Prohibition of Applications to Assign or Transfer Control of Ship Licenses

37. Under the Commission's Rules, ship licenses, unlike most other types of wireless radio licenses, may not be assigned or transferred.[103] As a consequence, an entity that holds ship licenses among other types of wireless radio licenses that it wishes to assign or transfer to another entity may not include the ship licenses on the FCC Form(s) 603 it files to request authorization for the assignment or transfer of the non-ship licenses. Instead, the licensee must submit the ship licenses to the Commission for cancellation, and the entity wishing to acquire those licenses must instead apply for new ship licenses in its own name. Due to uncertainty as to when the applications for the new ship licenses will be granted, there may be a need for the applicant to request special temporary authorization to ensure that the existing ship radio stations may continue to be used without disruption during the interim before the new licenses are granted.

38. The prohibition on assigning or transferring ship licenses therefore requires applicants and Commission licensing personnel to undertake a relatively cumbersome process when control of ship radio station assets are to change hands, and there appears to be little public interest benefit, if any, for continuing the prohibition. We note the Commission has eliminated the analogous prohibition on the assignment or transfer of aircraft licenses.[104] We see no basis for treating ship station licenses differently. We therefore propose to amend Section 1.948 of the Commission's Rules to remove the prohibition on the assignment or transfer of ship licenses.[105] Commenters supporting such an amendment should address whether any other of the Commission's Rules should be amended in order to permit assignment or transfer of ship radio station licenses, and whether ship license assignments and transfers could occur under the same basic regulatory framework, and using the same FCC Form 603, as is now used for the assignment and transfer of other wireless licenses. Parties opposing this proposal to allow transfers and assignments of ship station licenses on Form 603 are requested to explain in detail why they believe that allowing such transfers and assignments might be contrary to the public interest.

[102] *See* Appendix B, *infra*, proposed Sections 80.351 and 80.364.

[103] *See* 47 C.F.R. § 1.948(b)(5). The only other types of wireless licenses that may not be assigned or transferred are Amateur, Commercial Operator and, except for the 218-219 MHz Service, Personal Radio Services licenses. *Id*. The Personal Radio Services generally are licensed by rule. *See generally* 47 C.F.R. Part 95. The bar on assigning or transferring Amateur and Commercial Operator licenses is a logical corollary of the requirement that applicants for such licenses pass an examination to demonstrate their qualifications. *See* 47 C.F.R. §§ 13.201 (examination requirement for Commercial Operator license applicants), 97.501 (examination requirement for Amateur Radio Service license applicants).

[104] *See* Review of Part 87 of the Commission's Rules Concerning the Aviation Radio Service, *Third Report and Order*, WT Docket No. 01-289, 25 FCC Rcd 7610, 7619 ¶ 15 (2010).

[105] *See* Appendix B, *infra*, proposed Section 1.948(b)(5).

J. Editorial Corrections

39. The Commission recently amended its rules concerning commercial radio operator licenses for maritime and aviation radio stations.[106] When certain Part 80 rules[107] were amended to reflect these changes, references to Title III of the Communications Act inadvertently were codified as references to Title II, and certain subparagraphs were inadvertently deleted from another rule.[108] We propose to correct these and other typographical errors in the Part 80 rules.[109]

IV. PROCEDURAL MATTERS

40. *Regulatory Flexibility Analysis.* The Regulatory Flexibility Act of 1980, as amended (RFA),[110] requires that a regulatory flexibility analysis be prepared for notice-and-comment rulemaking proceedings, unless the agency certifies that "the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities."[111] As required by the RFA,[112] the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules proposed in this *Notice of Proposed Rule Making* (*Notice*). The analysis is found in Appendix A. We request written public comment on the IRFA. Comments must be filed in accordance with the same filing deadlines for comments on the *Notice*, and must have a separate and distinct heading designating them as responses to the IRFA. The Commission will send a copy of this *Notice of Proposed Rule Making*, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.

41. *Paperwork Reduction Analysis*. This *NPRM* does not contain proposed information collection(s) subject to the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, therefore, it does not contain a proposed new or modified "information collection burden for small business concerns with fewer than 25 employees," pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. § 3506(c)(4).

42. *Ex Parte Presentations.* The proceeding this *Notice* initiates shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.[113] Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or

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[106] *See* Amendment of the Commission's Rules Concerning Commercial Radio Operators, *Report and Order*, WT Docket No. 10-177, 28 FCC Rcd 532 (2013).

[107] 47 C.F.R. §§ 80.157, 80.159(b), 80.1005.

[108] 47 C.F.R. § 80.203(g)(3)(i)-(iv).

[109] For example, we also propose to correct errors in the sections incorporating by reference IEC 61097-3, IEC 61097-7, and IEC 61097-12. *See* 47 C.F.R. §80.7(d)(5), (8), (12) (stating 1097 instead of 61097).

[110] The RFA, *see* 5 U.S.C. §§ 601-612, was amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

[111] 5 U.S.C. § 605(b).

[112] 5 U.S.C. § 603.

[113] 47 C.F.R. §§ 1.1200 *et seq.*

arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (*e.g.*, .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

43. *Comment Dates and Filing Procedures.* Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://apps.fcc.gov/ecfs//.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing. If more than one active docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

44. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

45. People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

46. Comments, reply comments, and *ex parte* submissions will be available for public inspection during regular business hours in the FCC Reference Center, Federal Communications Commission, 445 12th Street, S.W., Room CY-A257, Washington, D.C. These documents will also be available via ECFS. Documents will be available electronically in ASCII, Microsoft Word, and/or Adobe Acrobat.

47. For further information, contact Mr. Jim Shaffer, Mobility Division, Wireless Telecommunications Bureau, (202) 418-1306 or TTY (202) 418-7233; or via e-mail at james.shaffer@fcc.gov .

V. ORDERING CLAUSES

48. Accordingly, IT IS ORDERED, pursuant to sections 4(i), 301, 303(r), 308, 309, 332(a)(2), 356, and 384 of the Communications Act of 1934, 47 U.S.C. §§ 154(i), 301, 303(r), 308, 309, 332(a)(2), 356, and 384, that this *Notice of Proposed Rulemaking* is HEREBY ADOPTED.

49. IT IS FURTHER ORDERED that the petitions for rulemaking filed by the Radio Technical Commission for Maritime Services on June 20, 2009, RM-11667, and August 19, 2009, RM-11563, ARE GRANTED to the extent set forth herein and otherwise DENIED.

50. IT IS FURTHER ORDERED that the petition for rulemaking filed by the National Global Maritime Distress and Safety System Implementation Task Force on June 10, 2009, RM-11540, IS DENIED.

51. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this *Notice of Proposed Rulemaking*, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

Initial Regulatory Flexibility Analysis

As required by the Regulatory Flexibility Act (RFA),[1] the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in the *Notice of Proposed Rulemaking* (*Notice*). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments provided in this *Notice*. The Commission will send a copy of the *Notice*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.[2] In addition, the *Notice* and IRFA (or summaries thereof) will be published in the Federal Register.[3]

A. Need for, and Objectives of, the Proposed Rules

In the *Notice*, we seek comment on rule amendments that are intended to enhance maritime safety and promote the efficient use of maritime radio spectrum. We also seek to conform the Commission's Part 80 rules with international standards where doing so will not undermine domestic regulatory objectives.

In the *Notice*, we first request comment on whether to require emergency position indicating radio beacons (EPIRBs) be capable of broadcasting GPS data when activated. EPIRBs are carried on board ships to alert others of a distress situation, and to assist search and rescue units in locating those in distress. EPIRBs that transmit GPS coordinates enable search and rescue authorities to determine an accurate location significantly faster than traditional EPIRBs, which rely on satellite Doppler shift to identify the distress location. Second, we invite comments on whether to update the equipment standards for Personal Locator Beacons (PLBs). Like EPIRBs, PLBs send distress signals that are detected by satellite and relayed to search and rescue authorities. Incorporation of the most recent standards will ensure that PLBs meet current functional and technical parameters. Third, we ask commenters to consider whether we should amend the rules to authorize equipment certification and use of Satellite Emergency Notification Devices (SENDs) under Part 95 of the Commission's Rules, or continue to authorize them under Part 25. SENDs also send distress signals, but they typically are subscription services that utilize commercial mobile satellite service systems. Fourth, we ask whether to permit equipment certification and use of Maritime Survivor Locating Devices (MSLDs). MSLDs are intended for use by persons at risk of falling into the water such as mariners and workers on marine installations or docks. Fifth, we ask whether to provide for equipment certification and use of Automatic Identification System Search and Rescue Transmitters (AIS-SARTs) devices that comply with international standards. Like EPIRBs, SARTs are carried on board ships to alert others of a distress situation, and to assist search and rescue units in locating those in distress. Unlike traditional 9 GHz SARTs, AIS-SARTs a unique identification code and GPS coordinates to all AIS-equipped vessels within VHF radio range. Sixth, we solicit comment of clarifying certain radar equipment standards that must be met by voluntary and compulsory vessels. The standards currently incorporated in the rules impose unnecessary burdens on voluntary vessels. Seventh, we ask commenters to consider whether we should permit the use of portable marine VHF radio transmitters by persons on shore. Eighth, we invite comment on whether to permit VHF digital small message service (VDSMS) on certain maritime VHF channels to promote flexibility and efficiency in the use of marine communications. Finally, we request comment of whether to allow applications of assignment or transfer control of ship licenses.

[1] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

[2] *See* 5 U.S.C. § 603(a).

[3] *See id*.

B. Legal Basis

Authority for issuance of this item is contained in Sections 4(i), 303(r), and 332(a)(2) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r), 332(a)(2).

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply

The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.[4] The RFA defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[5] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[6] A small business concern is one which (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).[7]

Marine Radio Services. Small businesses in the aviation and marine radio services use a marine very high frequency (VHF), medium frequency (MF), or high frequency (HF) radio, any type of emergency position indicating radio beacon (EPIRB) and/or radar, an aircraft radio, and/or any type of emergency locator transmitter (ELT). The Commission has not developed a definition of small entities specifically applicable to these small businesses. For purposes of this analysis, the Commission uses the SBA small business size standard for the category Wireless Telecommunications Carriers (except satellite)," which is 1,500 or fewer employees.[8] For this category, census data for 2007 show that there were 11,163 establishments that operated for the entire year.[9] Of this total, 10,791 establishments had employment of 999 or fewer employees and 372 had employment of 1000 employees or more.[10] Thus under this category and the associated small business size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities that may be affected by our proposed action.[11]

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[4] 5 U.S.C. § 603(b)(3).

[5] 5 U.S.C. § 601(6).

[6] 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

[7] Small Business Act, 15 U.S.C. § 632 (1996).

[8] 13 C.F.R. § 121.201, NAICS code 517210;http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517210&search=2007%20NAICS%20Search.

[9] U.S. Census Bureau, Subject Series: Information, Table 5, "Establishment and Firm Size: Employment Size of Firms for the United States: 2007 NAICS Code 517210" (issued Nov. 2010).

[10] http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2007_US_51SSSZ2&prodType=table*Id*. Available census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "100 employees or more."

[11] *See http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2007_US_51SSSZ2&prodType=table*

Wireless Service Providers. The proposed rules would affect licensees using VHF Public Coast spectrum. In the *Third Report and Order* in PR Docket No. 92-257, the Commission defined the term "small entity" specifically applicable to public coast station licensees as any entity employing less than 1,500 persons, based on the definition under the Small Business Administration rules applicable to radiotelephone service providers. *See* Amendment of the Commission's Rules Concerning Maritime Communications, *Third Report and Order and Memorandum Opinion and Order*, PR Docket No. 92-257, 13 FCC Rcd 19853, 19893 (1998) (citing 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Code 4812). Below, we provide the economic census category and data for wireless entities, which encompasses public coast stations.

The SBA has developed a small business size standard for wireless firms within the two broad economic census categories of "Paging"[12] and "Cellular and Other Wireless Telecommunications."[13] Under both categories, the SBA deems a wireless business to be small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 2002 show that there were 807 firms in this category that operated for the entire year.[14] Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.[15] Thus, under this category and associated small business size standard, the majority of firms can be considered small. For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.[16] Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.[17] Thus, under this second category and size standard, the majority of firms can, again, be considered small.

Radio Equipment Manufacturers. Some of the rules proposed herein may also affect small businesses that manufacture marine radio equipment and radiobeacon equipment designed for distress alerting and location. The Census Bureau does not have a category specific to these equipment manufacturers. The appropriate category is that for wireless communications equipment manufacturers. The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment."[18] The SBA has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, which is all such firms having 750 or fewer employees.[19] According to Census bureau data for 2007, there were a total of 939 firms in this category that operated that year. Of this total, 912

[12] 13 C.F.R. § 121.201, NAICS code 517211.

[13] 13 C.F.R. § 121.201, NAICS code 517212.

[14] U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization," Table 5, NAICS code 517211 (issued Nov. 2005).

[15] *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

[16] U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization," Table 5, NAICS code 517212 (issued Nov. 2005).

[17] *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

[18] http://www.census.gov/econ/industry/def/d33422.htm.

[19] 13 C.F.R. § 121.201 NAICS code 334220.

had fewer than 500 employees and 27 had 500 or more employees.[20] Thus, under this size standard, the majority of firms can be considered small.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

We invite interested parties to address the economic impact of these possible rule changes on small vessel operators, small marine radio equipment manufacturers and other small businesses that may be subject to the new requirements. We seek information on whether the compliance costs may outweigh the safety benefits of these rule changes, and whether there are alternative means of securing the safety benefits of these requirements through means that are less burdensome to regulatees. We do not believe any of the matters discussed in the *Notice* would have a direct, significant economic impact on a substantial number of small entities. We note that most of the proposals would not require the replacement of any equipment. Only EPIRBs (which only commercial vessels are required to carry) and PLBs (which no vessel is required to carry) might be subject to a requirement to stop using existing models after a certain date. The *Notice* seeks comment on whether, and if so, when, to phase out existing EPIRBs and PLBs. However, any commenters that disagree with that tentative conclusion are asked to explain the basis of that disagreement.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives, among others: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.[21]

In the *Notice*, we ask that commenters provide information on economic impact to manufacturers and consumers if the Commission were to adopt various standards to accommodate VDSMS, MSLDs, SENDs, and AIS-SARTs. The proposed requirements for the equipment generally take the form of performance standards rather than design standards, and therefore confer on smaller entities the flexibility to select the most economical design that can achieve the required performance. For example, the RTCM standards for VDSMS, MSLDs and SENDs equipment that we propose to incorporate in 47 C.F.R. Parts 80 and 95 mandate certain functionality for the equipment but do not mandate that manufacturers design their equipment in any particular way in order to achieve that functionality.

In the *Notice*, we also seek comment on whether the Commission should require that EPIRBs be capable of broadcasting GPS data when activated. Notwithstanding the important safety benefits that would accrue from imposing such a requirement, we request that interested parties to address the cost to comply with the requirement and whether the costs of such a requirement would outweigh the safety benefits. Commenters are asked to suggest any alternatives or supplementary measures that can be taken to facilitate search and rescue efforts. Commenters are asked to address measures to reduce the compliance burden of such a requirement on small entities.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

None.

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[20] *See* http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk.
[21] *See* 5 U.S.C. § 603(c).

APPENDIX B

Proposed Rules

Chapter I of Title 47 of the Code of Federal Regulations, Parts 1, 80 and 95, are proposed to be amended as follows:

PART 1 – PRACTICE AND PROCEDURE

1. The authority citation for Part 1 continues to read as follows:

AUTHORITY: 15 U.S.C. 79 et seq; 47 U.S.C. 151, 154(i), 154(j), 155, 157, 225, 227, 303(r), and 309, Cable Landing License Act of 1921, 47 U.S.C. 35-39, and the Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. 112-96.

2. Section 1.948 is amended by revising paragraph (b)(5) to read as follows:

§ 1.948 Assignment of authorization or transfer of control, notification of consummation.

* * * * *

(b)(5) Licenses, permits, and authorizations for stations in the Amateur, Commercial Operator and Personal Radio Services (except 218–219 MHz Service) may not be assigned or transferred, unless otherwise stated.

* * * * *

PART 80 – STATIONS IN THE MARITIME SERVICES

3. The authority citation for Part 80 continues to read as follows:

AUTHORITY: Secs. 4, 303, 307(e), 309, and 332, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303, 307(e), 309, and 332, unless otherwise noted. Interpret or apply 48 Stat. 1064-1068, 1081-1105, as amended; 47 U.S.C. 151-155, 301-609; 3 UST 3450, 3 UST 4726, 12 UST 2377.

4. Section 80.7 is amended by removing paragraphs (d)(17), (g), (g)(1), and (g)(2), redesignating current paragraphs (d)(14) through (16) as (d)(15) through (17), adding new paragraphs (d)(14) and (f)(4), and revising paragraphs (b)(28), (d)(5), (8), (12), (f)(2), (3), and (g)(1), (2) to read as follows:

§ 80.7 Incorporation by reference.

* * * * *

(b) * * *

(28) IMO Resolution MSC.246(83), ("IMO Resolution MSC.246(83)") "Adoption of Performance Standards for Survival Craft AIS Search and Rescue Transmitters (AIS-SART) for Use in Search and Rescue Operations." IRB approved for § 80.233.

(c) * * *

(d) * * *

(5) IEC 61097-3:1994 ("IEC 61097-3"), First edition, 1994-06, "Global maritime distress and safety system (GMDSS)–Part 3: Digital selective calling (DSC) equipment–Operational and performance requirements, methods of testing and required testing results," with Annexes, IBR approved for § 80.1101.

* * *

(8) IEC 61097-7:1996 ("IEC 61097-7"), First edition, 1996-10, "Global maritime distress and safety system (GMDSS)–Part 7: Shipborne VHF radiotelephone transmitter and receiver–Operational and performance requirements, methods of testing and required test results," IBR approved for § 80.1101.

* * *

(12) IEC 61097-12:1996(E) ("IEC 61097-12"), First edition, 1996-11, "Global maritime distress and safety system (GMDSS)–Part 12: Survival craft portable two-way VHF radiotelephone apparatus–Operational and performance requirements, methods of testing and required test results," IBR approved for § 80.1101.

* * *

(14) IEC 61097-14 Ed. 1 ("IEC 61097-14"), "Global maritime distress and safety system (GMDSS) – Part 14: AIS search and rescue transmitter (AIS-SART) – Operational and performance requirements, methods of testing and required test results." ED 1.0 (2010-02), IRB approved for § 80.233.

* * *

(f) * * *

(2) RTCM Standard 11000.3 ("RTCM 11000"), "RTCM Standard 11000.3 for 406 MHz Satellite Emergency Position-Indicating Radiobeacons (EPIRBs)," June 12, 2012, IBR approved for § 80.1061.

(3) RTCM Standard 11020.1 ("RTCM 11020"), "RTCM Standard 11020.1, Ship Security Alert Systems (SSAS) Using the Cospas-Sarsat System," October 9, 2009, IBR approved for § 80.277.

(4) RTCM Standard 12301.1 ("RTCM 12301"), VHF-FM Digital Small Message Services, July 10, 2009, IBR approved for § 80.361.

5. Section 80.59 is amended by revising the note in paragraph (a)(1) to read as follows:

§ 80.59 Compulsory ship inspections.

(a) * * *

(1) * * *

Note: Nothing in this section prohibits Commission inspectors from inspecting ships. The mandatory inspection of U.S. vessels must be conducted by an FCC-licensed technician holding an FCC General Radiotelephone Operator License, GMDSS Radio Maintainer's License, Second Class Radiotelegraph Operator's Certificate, First Class Radiotelegraph Operator's Certificate, or Radiotelegraph Operator License in accordance with the following table:

* * * * *

6. Section 80.157 is amended to read as follows:

§ 80.157 Radio officer defined.

A *radio officer* means a person holding a First Class Radiotelegraph Operator's Certificate, Second Class Radiotelegraph Operator's Certificate, or Radiotelegraph Operator License issued by the Commission, who is employed to operate a ship radio station in compliance with Part II of Title III of the Communications Act. Such a person is also required to be licensed as a *radio officer* by the U.S. Coast Guard when employed to operate a ship radiotelegraph station.

7. Section 80.159 is amended by revising paragraph (b) as follows:

§ 80.159 Operator requirements of Title III of the Communications Act and the Safety Convention.

* * * * *

(b) Each cargo ship equipped with a radiotelegraph station in accordance with Part II of Title III of the Communications Act and which has a radiotelegraph auto alarm must carry a radio officer holding a First Class Radiotelegraph Operator's Certificate, Second Class Radiotelegraph Operator's Certificate, or Radiotelegraph Operator License who has had at least six months service as a radio officer on board U.S. ships. If the radiotelegraph station does not have an auto alarm, a second radio officer who holds a First Class Radiotelegraph Operator's Certificate, Second Class Radiotelegraph Operator's Certificate, or Radiotelegraph Operator License must be carried.

* * * * *

8. Section 80.203 is amended by adding paragraphs (g)(3)(i)-(iv) to read as follows:

§ 80.203 Authorization of transmitters for licensing.

* * * * *

(g) * * *

(3) * * *

(i) Internal adjustments of the transmitter;

(ii) Use of controls normally inaccessible to the station operator;

(iii) Use of external devices or equipment modules made available only to service and maintenance personnel through a service company; and

(iv) Copying of a channel selection program directly from another transmitter (cloning) using devices and procedures made available only to service and maintenance personnel through a service company.

* * * * *

9. Section 80.231 is amended by revising paragraph (c) introductory paragraph to read as follows:

§ 80.231 Technical requirements for Class B Automatic Identification System equipment.

* * * * *

(c) Prior to submitting a certification application for a Class B AIS device, the following information must be submitted in duplicate to the Commandant CG-ENG, U.S. Coast Guard Headquarters, 2100 2nd Street, SW, Stop 7126, Washington, DC 20593-7126:

* * * * *

10. Section 80.233 is added to read as follows:

§ 80.233 Technical requirements for Automatic Identification System Search and Rescue Transmitters (AIS-SART) equipment.

(a) Automatic Identification System Search and Rescue Transmitter (AIS-SART) equipment must meet the technical requirements of IEC 61097-14 and IMO Resolution MSC.246(83) (incorporated by reference, *see* § 80.7(b)).

(b) Prior to submitting a certification application for an AIS-SART device, the following information must be submitted in duplicate to the Commandant CG-ENG, US Coast Guard Headquarters, 2100 Second Street, SW Stop 7126, Washington, DC 20593-7126:

(1) The name of the manufacturer or grantee and the model number of the AIS-SART device; and

(2) Copies of the test report and test data obtained from the test facility showing that the device complies with the environmental and operational requirements identified in IEC 61097-14.

(c) After reviewing the information described in paragraph (c) of this section, the U.S. Coast Guard will issue a letter stating whether the AIS-SART device satisfies all of the requirements specified in IEC 61097-14.

(d) A certification application for an AIS-SART device submitted to the Commission must contain a copy of the U.S. Coast Guard letter stating that the device satisfies all of the requirements specified in IEC 61097-14, a copy of the technical test data, and the instruction manual(s).

11. Section 80.273 is amended by removing paragraph (b), redesignating paragraphs (c) and (d) as paragraphs (b) and (c), and revising paragraph (b) to read as follows:

§ 80.273 Radar standards.

* * * * *

(b) For any ship of 10,000 tons gross tonnage and upwards or that is otherwise required to be equipped with two radar systems, each of the two radar systems must be capable of operating independently and must comply with the specifications, standards and general requirements set forth on paragraph (a) of this section. One of the systems must provide a display with an effective diameter of not less than 340 millimeters (13.4 inches), (16-inch cathode ray tube). The other system must provide a display with an effective diameter of not less than 250 millimeters (9.8 inches), (12-inch cathode ray tube).

* * * * *

12. Section 80.277 is amended by revising paragraph (a)(1) to read as follows:

§ 80.277 Ship Security Alert System (SSAS).

(a) * * *

(1) Equipment that complies with RTCM 11020 (incorporated by reference, §§ 80.7); or

* * * * *

13. The first heading under Subpart H and Section 80.351 are amended to read as follows:

RADIOTELEGRAPHY AND DATA

§ 80.351 Scope.

The following sections describe the carrier frequencies and general uses of radiotelegraphy and data transmission with respect to the following:

-Distress, urgency, safety, call and reply.
-Working.
-Digital selective calling (DSC).
-Narrow-band direct-printing (NB-DP).
-Facsimile.
-VHF-FM digital small message services (VDSMS).

14. Section 80.364 is added under the heading for Radiotelegraphy and Data to read as follows:

§ 80.364 Frequencies for VHF digital small message services (VDSMS).

(a) Except as set forth in paragraph (b), frequencies in the 156-162 MHz band may be used for VHF digital small message services (VDSMS) complying with RTCM 12301 (incorporated by reference, *see* § 80.7).

(b)(1)

VHF-FM CHANNELS NOT AVAILABLE FOR DIGITAL SMALL MESSAGE SERVICE

Channel	Frequency (MHz)
06	156.300
67	156.375
70	156.525
13	156.650
15	156.750
75	156.775
16	156.800
76	156.825
17	156.850
22A	157.100
AIS 1/2	161.975/162.025

(2) Unless authorized by the United States Coast Guard, VDSMS is also prohibited in designated U.S. Coast Guard Vessel Traffic Service areas on frequencies reserved for those services under § 80.373(f) of this chapter.

15. Section 80.1005 is amended to read as follows:

§ 80.1005 Inspection of station.

The bridge-to-bridge radiotelephone station will be inspected on vessels subject to regular inspections pursuant to the requirements of Parts II and III of Title III of the Communications Act, the Safety Convention or the Great Lakes Agreement at the time of the regular inspection. If after such inspection, the Commission determines that the Bridge-to-Bridge Act, the rules of the Commission and the station license are met, an endorsement will be made on the appropriate document. The validity of the endorsement will run concurrently with the period of the regular inspection. Each vessel must carry a certificate with a valid endorsement while subject to the Bridge-to-Bridge Act. All other bridge-to-bridge stations will be inspected from time to time. An inspection of the bridge-to-bridge station on a Great Lakes Agreement vessel must normally be made at the same time as the Great Lakes Agreement inspection is conducted by a technician holding one of the following: a General Radiotelephone Operator License, a GMDSS Radio Maintainer's License, a Radiotelegraph Operator License, a Second Class Radiotelegraph Operator's Certificate, or a First Class Radiotelegraph Operator's Certificate. Additionally, the technician must not be the vessel's owner, operator, master, or an employee of any of them. Ships subject to the Bridge-to-Bridge Act may, in lieu of an endorsed certificate, certify compliance in the station log required by section 80.409(f).

16. Section 80.1053 is amended to read as follows:

§ 80.1053 Prohibition on certification, manufacture, importation, sale or use of Class A, Class B, Class S, and INMARSAT-E EPIRBs.

The manufacture, importation, sale or use of Class A, Class B, Class S, or INMARSAT-E EPIRBs is prohibited. New Class A, Class B, Class S, or INMARSAT-E EPIRBs will no longer be certified by the Commission.

17. Section 80.1061 is amended to revise paragraphs (a), (c) introductory paragraph, (c)(1), and (c)(1)(ii) to read as follows:

§ 80.1061 Special requirements for 406.0-406.1 MHz EPIRB stations.

(a) Notwithstanding the provisions in paragraph (b) of this section, 406.0-406.1 MHz EPIRBs must meet all the technical and performance standards contained in RTCM 11000 (incorporated by reference, *see* § 80.7), and must also comply with the standards specified in § 80.1101(c)(5).

* * *

(c) Prior to submitting a certification application for a 406.0-406.1 MHz radiobeacon, the radiobeacon must be certified by a test facility recognized by one of the COSPAS-SARSAT Partners that the equipment satisfies the design characteristics associated with the measurement methods incorporated in RTCM Standard 11000 (incorporated by reference, *see* § 80.7). Additionally, the radiobeacon must be subjected to the environmental and operational tests associated with the test procedures described in Appendix A of RTCM Standard 11000 (incorporated by reference, *see* § 80.7), by a test facility accepted by the U.S. Coast Guard for this purpose. Information regarding accepted test facilities may be obtained from Commandant CG-ENG-4, US Coast Guard Headquarters, 2100 Second Street, SW Stop 7126, Washington, DC 20593-7126, http://cgmix.uscg.mil/EQLabs/EQLabsSearch.aspx.

(1) After a 406.0-406.1 MHz EPIRB has been certified by the recognized test facilities the following information must be submitted in duplicate to the Commandant CG-ENG, U.S. Coast Guard Headquarters, 2100 2nd Street, SW Stop 7126, Washington, DC 20593-1726:

* * *

(ii) Copies of the certificate and test data obtained from the test facility recognized by a COSPAS/SARSAT Partner showing that the radiobeacon complies with the COSPAS-SARSAT design characteristics associated with the measurement methods described in the COSPAS/SARSAT Standard C/S T.001 and COSPAS-SARSAT Standard C/S T.007, and RTCM 11000 (all incorporated by reference, *see* § 80.7);

* * * * *

18. Section 80.1085 is amended by revising paragraph (a)(3) to read as follows:

§ 80.1085 Ship radio equipment–General.

* * * * *

(a) * * *

(3) A radar transponder capable of operating in the 9 GHz band or an AIS-SART, which must be stowed so that it is easily utilized (this device may be one of those required by § 80.1095(b) for survival craft);

* * * * *

19. Section 80.1095 is amended by revising paragraph (b) to read as follows:

§ 80.1095 Survival craft equipment.

* * * * *

(b) At least one radar transponder (or AIS-SART) must be carried on each side of every passenger ship and every cargo ship of 500 tons gross tonnage and upwards. At least one radar transponder (or AIS-SART) must be carried on every cargo ship of 300 tons gross tonnage and upwards but less than 500 tons gross tonnage. Such radar transponders (or AIS-SARTs) must conform to performance standards as specified in § 80.233 or § 80.1101. The radar transponders (or AIS-SARTs) must be stowed in such locations that they can be rapidly placed in any survival craft other than liferafts required on cargo ships in forward and aft areas (see Regulation III/26.1.4 of the SOLAS Convention). Alternatively, one radar transponder (or AIS-SART) must be stowed in each survival craft other than those required by Regulation III/26.1.4 of the SOLAS Convention. One of these radar transponders (or AIS-SARTs) may be the radar transponder (or AIS-SART) required by § 80.1085(a)(3).

* * * * *

PART 95 – PERSONAL RADIO SERVICES

20. The authority citation for part 95 continues to read as follows:

AUTHORITY: Secs. 4, 303, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303.

21. Subpart K is amended to revise the title to read as follows:

Subpart K —Personal Locator Beacons (PLB) and Maritime Survivor Locating Devices (MSLD)

22. Section 95.1400 is amended to read as follows:

§ 95.1400 Basis and purpose.

The rules in this subpart are intended to provide individuals in the water or in remote areas a means to alert others of an emergency situation and to aid search and rescue personnel in locating those in distress.

23. Section 95.1402 is amended by revising paragraph (a) to read as follows:

§ 95.1402 Special requirements for 406 MHz PLBs.

(a) All 406 MHz PLBs must meet all the technical and performance standards contained in the Radio Technical Commission for Maritime (RTCM) Service document "RTCM Standard 11010.2 for 406 MHz Satellite Personal Locator Beacons (PLBs)," with Amendment 1, and with Amendment 2, dated June 8, 2012. This RTCM document is incorporated by reference in accordance with 5 U.S.C. 552(a), and 1 CFR part 51. Copies of the document are available and may be obtained from the Radio Technical Commission for Maritime Services, 1611 N. Kent Street, Suite 605, Arlington, Virginia 22209. The document is available for inspection at Commission headquarters at 445 12th Street SW., Washington, DC 20554. Copies may also be inspected at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html*.

* * * * *

24. Section 95.1403 is added to read as follows:

§ 95.1043 Special requirements for Maritime Survivor Locating Devices.

(a) Maritime Survivor Locating Devices (MSLDs) are devices intended to aid in the location of persons in the water. Use on land is not authorized.

(b) Every MSLD sold in the United States after [INSERT DATE ONE YEAR AFTER EFFECTIVE DATE] that provides the functions described in this section, must meet all the technical and performance standards contained in RTCM document "RTCM Standard 11901.1 for Maritime Survivor Locating Devices (MSLD), dated June 4, 2012." This RTCM document is incorporated by reference in accordance with 5 U.S.C. 552(a), and 1 CFR part 51. Copies of the document are available and may be obtained from the Radio Technical Commission for Maritime Services, 1611 N. Kent Street, Suite 605, Arlington, Virginia 22209. The document is available for inspection at Commission headquarters at 445 12th Street SW., Washington, DC 20554. Copies may also be inspected at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.*

(c) All MSLDs must:

(1) Transmit on at least one of the following frequencies: 121.5 MHz, 156.525 MHz, 156.750 MHz, 156.800 MHz, 156.850 MHz, 161.975 MHz, 162.025 MHz; or

(2) Include a function intended to send a distress message directly to the U.S. Coast Guard or any other search and rescue organization.

(d) No device may be marketed or sold in the United States as a "MSLD" or "Maritime Survivor Locating Device" unless it is compliant with the requirements in this section.

(e) Before an MSLD certification application is submitted to the Commission, the applicant must have obtained test report from a test laboratory which shows that the MSLD complies with the electrical and environmental standards associated with RTCM 11901.1. The test laboratory must be accredited to ISO/IEC 17025 with a scope covering the applicable requirements and test procedures.